

Village of Ruidoso

Water Quality Report for 2005

We're pleased to present to you 2005's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of the drinking water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water sources include: North Eagle Creek Wells #1, #3, #4, Brown Well, Green Well, Eagle Creek, Alto Lake Reservoir, Alto Well #1, Alto Well #2, and River Well. These water sources are treated at the Alto Crest Water Treatment Plant. Grindstone Lake Reservoir is the only source treated by Grindstone Water Treatment Plant. Cherokee Well supplies a portion of the system with water as well as Hollywood Well.

The Village of Ruidoso is pleased to report that our drinking water is safe and meets or exceeds State and Federal requirements. If you have any questions about this report or concerns about your water utility, please contact: Village of Ruidoso, 313 Cree Meadows Dr., Ruidoso, NM 88345, 505-257-5525.

The Village of Ruidoso routinely monitors for constituents in your drinking water according to Federal and State laws. The table below shows the results of our monitoring for the period of January 1st to December 31st, 2005. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Not Available (N/A) - indicates that information is not available or not applicable at this time.

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Monitoring Not Required (MNR) - monitoring not required but recommended.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal - The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Source Water Assessment. The Village of Ruidoso is scheduled for evaluation of the system this year by the New Mexico Environment Department.

| PARAMETER | UNITS | Grindstone WTP | | Alto Crest WTP | | MCL | MCLG |
|-----------------------|-------|----------------|----------------|----------------|----------------|---------------|---------------|
| | | High Sample | Low Percentile | High Sample | Low Percentile | | |
| Turbidity | NTU | 0.70 | 99.9 | 0.29 | 100 | < 0.3 NTU/95% | < 0.3 NTU/95% |
| Disinfectant Residual | mg/l | 2.5 | N/A | 1.8 | N/A | 4 | N/A |

| PARAMETER | UNITS | GRINDSTONE WTP | ALTO CREST WTP | CHEROKEE WELL | HOLLYWOOD WELL | MCL | MCLG |
|---|-------|----------------|----------------|---------------|----------------|-----|------|
| Total Coliform Bacteria | | ND | ND | ND | ND | 5% | 0% |
| Inorganic & Radioactive Contaminants | | | | | | | |
| Barium | ppm | .06 | .05 | .01 | .04 | 2 | 2 |
| Chromium | ppb | 3.4 | 7.7 | 11.6 | 6.9 | 100 | 100 |
| Fluoride | ppm | .03 | 1.6 | 0.6 | 0.03 | 4 | 4 |
| Lead | ppb | ND | 1.3 | 1.6 | ND | 15 | |
| Nickel | ppb | ND | 2.3 | 5.4 | 2.3 | MNR | MNR |
| Nitrate (as Nitrogen) | ppm | 0.59 | ND | 0.12 | 0.25 | 10 | 10 |
| Selenium | ppb | ND | 2.2 | 4.4 | 2.7 | 50 | 50 |
| Gross Alpha | pCi/L | ND | 2.54 | ND | ND | 15 | NA |
| Gross Beta | pCi/L | 0.38 | 4.44 | ND | 3.42 | NA | NA |
| Ra -228/226 | pCi/L | ND | 0.12 | 0.56 | 0.69 | 5 | NA |
| Disinfection-Disinfection By-Products | | | | | | | |
| | | Grindstone WTP | Alto Crest WTP | Average | Range | MCL | MCLG |
| Total Trihalomethanes | ppb | 72.1 | 42.1 | 47.5 | 1 – 72.1 | 80 | N/A |
| HAA5 | ppb | 62.6 | 17.7 | 31.4 | 2 – 62.6 | 60 | N/A |

| Lead And Copper * | | | | | | | |
|--------------------------|-----|---------------------|---|--|--|-----|------|
| | | 90 Percentile Level | | | | MCL | MCLG |
| Lead | ppb | 7.4 | . | | | 15 | N/A |
| Copper | ppm | 0.18 | | | | 1.3 | 1.3 |

* Collected in 2005 throughout the system

Microbiological Contaminants:

- (1) Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
- (2) Fecal coliform/E.Coli. Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.
- (3) Turbidity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Inorganic Contaminants:

- (7) Arsenic. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
- (8) Barium. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
- (9) Chromium. Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.

(10) Copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

(11) Fluoride. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

(12) Lead. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

(13) Nitrate. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

(14) Nitrite. Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

(15) Selenium. Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

(16) Thallium. Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.

Volatile Organic Contaminants:

(17) Total trihalomethanes (TTHM): Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their livers, kidneys, or central nervous systems, and may have an increase risk of getting cancer.

(18) Haloacetic Acids (HAA5): Some people who drink water containing haloacetic acids in excess of the MCL over many years have an increase risk of getting cancer.

Radioactive Contaminants:

(19) Gross Alpha emitters. Erosion of natural deposits.

(20) Gross Beta emitters. Decay of natural and man made deposits. The EPA considers 50 pCi/L to be the level of concern for Beta particles. —

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

What the EPA Says About Drinking Water Contaminants:

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

The sources of drinking water (both tap and bottle water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants in drinking water sources may include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater discharges, oil, and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban runoff, and septic systems.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activity.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and drug administration (FDA) regulations establish limits for contaminants in bottle water which must provide the same protection for public health.

